

REMARKS

Applicant thanks the Examiner for the thorough consideration given the present application. Claims 1-7 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of the Amendments and Remarks as set forth below.

Rejection Under 35 U.S.C. § 112

Claims 5-7 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is respectfully traversed. By way of the present Amendment, the claims have been amended to avoid this indefiniteness.

In regard to claim 5, the Examiner pointed out that it was not clear which latching unit was being referred to. By way of the present Amendment, the two latching units have been numbered so that proper antecedent basis is present.

In regard to claim 6, the Examiner pointed out that it was unclear what is being connected or disconnected from the latching unit. Claim 6 has now been amended to make it clear that the latching unit is being connected with the tracking/latching unit.

In regard to claim 7, the Examiner pointed out a lack of antecedent basis for the latch means. This has now been removed from the claim.

Accordingly, Applicant submits that all of the claims are now definite.

Rejection Under 35 U.S.C. § 102

Claims 1 and 6 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Michalski (U. S. Published Application No. 2004/0027265). This rejection is respectfully traversed.

The Examiner states that the reference shows a comparator with a differential input unit 25 having two analog input signals, a tracking/latching unit 30, 50-55, which performs tracking and latching operations through receiving a differential output of the differential input unit and having different current pass from each of the input terminals. Applicant disagrees that claim 1 is anticipated by Michalski.

Applicant has amended claim 1 to better define the invention. In particular, the tracking/latching unit has been amended to make it clear that the differential output is received through two terminals. It is also now clear that the main input terminal and the sub input terminal have a different current pass for having a constant gain of the comparator during the track mode operation.

Applicant submits that Michalski fails to disclose the tracking/latching unit as presently defined. The cross-coupled pair 30 and resistors 50-55 of Michalski, which are identified by the Examiner as the tracking/latching unit, do not receive the differential output of the differential input unit. Instead, the differential output generated by the differential amplifier 25 is input to the cross-coupled pair 26 of Michalski. This differs from the present invention where the differential output of the differential input unit is directly input to the tracking/latching unit.

In addition, the switching unit of the present invention is connected between the first latching unit and the tracking/latching unit in order to connect or disconnect the first latching unit with the tracking/latching unit in response to the clock signal. However, pair 40 of first and second switches 43 and 44 of Michalski is coupled to the cross-coupled pair 26. Further, while the tracking/latching unit of the present invention performs the track mode operation and the latch mode operation based on the clock signal, the latch embodiment 20 of Michalski uses a particular command signal, that is the latch command signal, for a transition from the acquire mode to the latch mode (see paragraph [0010] of Michalski). Accordingly, Applicant submits that claim 1 is not anticipated by Michalski.

Claims 2-7 depend from claim 1 and, as such, are also considered to be allowable over this reference.

Claims 1, 6 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the admitted prior art in Figure 2 of the present application. Applicant disagrees that the admitted prior art anticipates claim 1.

As discussed above, the claims have now been amended to better define over the prior art. Applicant submits that the admitted prior art fails to show the main input terminal and sub input terminal having a different current pass for having a constant gain of the comparator during the track mode operation. The comparator according to the admitted prior art operates as a differential amplifier during the track mode operation. However, a gain of the differential amplifier is unstable due to manufacturing variations involving a voltage variation, as noted on pages 5-7. This differs from the present

invention where the tracking/latching unit is capable of maintaining a constant gain of the comparator having different current pass. In view of this, Applicant submits that claim 1 is not anticipated by the admitted prior art Figure 2.

Claims 2-7 depend from claim 1 and, as such, are also considered to be allowable. In addition, the Examiner has indicated that claims 2-5 are allowable. Accordingly, Applicant submits that all of the claims are now allowable.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the references relied on by the Examiner. In view of this, reconsideration of the rejections and allowance of all of the claims are respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert F. Gnuse (Reg. No. 27,295) at (703) 205-8000 in the Washington, D.C. area.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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